WARNER ROBINS AREA TRANSPORTATION STUDY (WRATS)

TRANSIT FEASIBILITY STUDY PEER ANALYSIS 07/12/12

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Introduction

The Metropolitan Planning Organization (MPO) for the Warner Robins Urbanized Area is the Warner Robins Area Transportation Study (WRATS). WRATS plans and coordinates transportation improvements for the Warner Robins metropolitan planning area consistent with federal surface transportation legislation.

The Warner Robins metropolitan planning area consists of all of Houston County and the northeastern portion of Peach County, Georgia. It includes the incorporated cities of Warner Robins, Byron, Centerville and Perry, as shown in Figure 1. The metropolitan planning area of Warner Robins consists of 417 square miles and approximately 149,000 people.

The Transit Feasibility Study (TFS) examines the need for transit services in the Warner Robins metropolitan planning area. As the area continues to grow and develop there is increasing interest in the potential for transit service. Recent success of the BiRD commuter bus service between Macon and Robins Air Force Base (RAFB) underscores the potential for similar service within the Warner Robins metropolitan area. In addition, numerous human service agencies and not for profits have stated that there is a need for transit service in Warner Robins among the populations that they serve. RAFB has been a strong supporter of transit and vanpool service, on base shuttle service, and commute alternatives as a means of reducing the number of vehicles entering and exiting the base and the amount of parking necessary on the base.

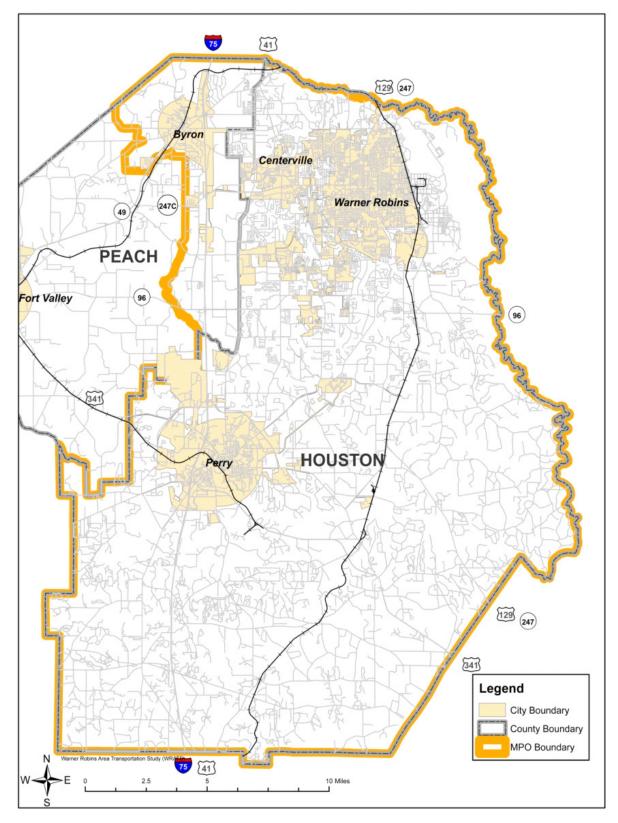
A transit feasibility study conducted by WRATS in 2003 recommended possible phased transit service options and assessed probable ridership and costs. However no action was taken as a result of the 2003 TFS, in part due to concern about who would pay for transit operations and operate the service, and in part due to concerns about the effectiveness of transit service in Warner Robins. A 2001 transit route feasibility study for service between Macon and RAFB resulted in the successful BiRD commuter service.

The 2012 WRATS TFS will update the study conducted in 2003 to reassess the market for transit taking into account demographic and development changes since 2003, and collecting new information from the public and stakeholder agencies on their views about the need for transit service in the Warner Robins metropolitan area. The TFS will provide a Transit Master Plan that identifies costs and funding associated with any recommended transit service options and an Implementation Plan that addresses phasing, marketing and operations for any recommended transit services.

This document summarizes the results of peer analysis completed as part of the TFS. Geographical, demographic, economic and other factors combine in a variety of ways to ensure that no urban area is exactly like another. In evaluating transit services, however, it can be informative to establish a focus group of urbanized area with some characteristics in common. Peer comparison is especially useful in transit planning for the benefit of knowing what type of service, how much service, and how well the service performs in similar areas. Peer averaging is a way of examining data from systems that have some features in common with the Warner Robins urbanized area as a whole, while minimizing the effects of any one system's unusually high or low operating characteristics, costs, productivity, efficiency, or effectiveness.



Figure 1 - WRATS Study Area





Peer Analysis Data Sources

The National Transit Database (NTD) was established by Congress to be the Nation's primary source for information and statistics on the systems of the United States. It is the only comprehensive source of validated operating and financial information reported by transit systems nationwide. Therefore, it is the most reliable source of data to use when comparing peer systems. The NTD is updated annually with information submitted by transit agencies. The FTA reviews and confirms the accuracy of the information and publishes a final report after a reporting transit agency successfully responds to all comments and inquiries.

The NTD reports various standard measures of performance that allow decision makers and other stakeholders to determine the efficiency and effectiveness of transit services on a local, regional and national basis. There are, however, some variations in how a few data items are reported from agency to agency, including service area size, service area population, and farebox revenue.

For the Warner Robins peer analysis, it is important to note that NTD reporting waivers are granted annually for a variety of reasons. Chief among them is system size. Systems with a small number of vehicles can be granted waivers upon request. In the past, systems with 9 or fewer vehicles qualified for small system waivers. That threshold was modified in Report Year 2010 to 30 or fewer vehicles. For that reason, data for many of the small transit systems which would have been useful in this peer analysis are not publicly available.

The NTD includes information on the size of urbanized areas, including population, land area, and population density. However, for the 2010 Report Year, the NTD did not yet have 2010 Census information and thus reported 2000 Census information. Therefore, for urbanized area statistics, the peer analysis relies directly on the recently released 2010 Census urbanized area data.

Peer Selection Process and Overview

The peer analysis begins with the identification of 7 to 10 peers from a much larger "universe" of bus systems included in the NTD for the 2010 Report Year, which is the most current, readily-available information. Selection criteria were established to narrow down potential bus systems to those with urbanized area populations, square miles and population densities similar to Warner Robins based on 2010 urbanized area data released by the U.S. Census in March 2012, and also number of peak buses operated by the system. As such, peer selection focused primarily on urbanized area populations less than 200,000, land areas of less than 200 square miles, population densities less than 2,000 people per square mile, and fewer than 30 vehicles operated during peak periods of service.

Bus systems that are in the northern and west coast states are also avoided as experience has demonstrated those geographic locations tend to be dissimilar operating environments to southern bus systems from a cost perspective. The set of peers also include a mix of transit systems, some of which provide transit service to a large military installation, provide a mix of urban fixed route and rural dial-a-ride service, operate a route deviation system, or are located in close proximity to another urbanized area.



It should be noted that the Warner Robins urbanized area defined by the U.S. Census is smaller than the WRATS metropolitan planning area boundary. The edges of metropolitan planning areas are typically made smoother than the Census urbanized area boundary and larger to take in the area likely to become urbanized within 20 years.

After careful review, nine peer urbanized areas with public transit systems were identified. Table 1 and Figure 2 present the 2010 urbanized area characteristics of the peer areas, with a focus on population density. As can be seen, when the peer areas are averaged, they closely approximate the Warner Robins urbanized area. The 2010 average population of the peer urbanized areas is 5% lower than the Warner Robins urbanized area, the average population density is 3% lower, the average land area is 5% larger.

Table 1 - Peer Urbanized Areas Overview

		2010 Census	
		Size	Population
Urbanized Area	Population	(Sq. Miles)	Density
Spartanburg, SC	180,786	190	951
Gainesville, GA	130,846	126	1,036
Johnson City, TN	120,415	110	1,096
Cleveland, TN	66,777	55	1,223
Albany, GA	95,779	71	1,352
Macon, GA	137,570	98	1,404
Clarksville, TN-KY	138,309	96	1,440
Columbus, GA-AL	192,338	95	2,015
St. Joseph, MO-KS	78,808	39	2,041
Peer Average	126,848	98	1,395
Warner Robins, GA	133,109	101	1,323

Figure 2 – 2010 Population and Population Density of Peer Urbanized Areas

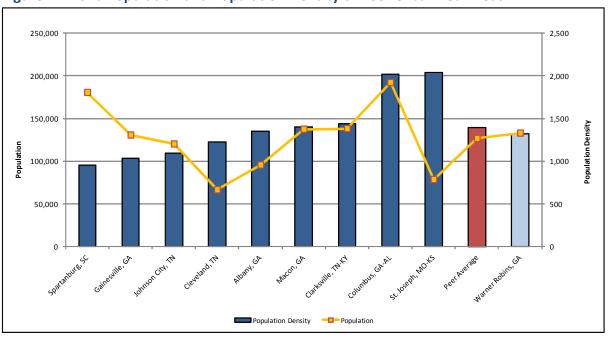




Table 2 presents the transit systems included in the peer analysis and the size of their transit service areas. The area served by transit is often smaller than the urbanized area, as services are typically focused on the areas with higher densities of population, employment, and origins and destinations. Comparing Table 1 to Table 2, each transit system, with the major exception of Spartanburg County Transportation Service Bureau (TSB), operates in a smaller area than its urbanized area. The TSB's 811 square mile service area compared to the 190 square mile urbanized area skews the peer average.

Table 2 – Transit Systems Overview

		Transit	Transit Service Area		
		System		Size	
Urbanized Area	Transit System Name	Nickname	Population	(Sq. Miles)	
Spartanburg, SC	Spartanburg Area Regional Transit Agency	SPARTA	70,000	40	
Spartanburg, SC	Spartanburg County Transportation Service Bureau	TSB	264,230	811	
Gainesville, GA	Hall Area Transit	HAT	31,782	38	
Johnson City, TN	Johnson City Transit System	JCT	49,381	33	
Cleveland, TN	Cleveland Urban Area Transit System	CUATS	38,627	24	
Albany, GA	Albany Transit System	ATS	75,616	17	
Macon, GA	Macon-Bibb County Transit Authority	MTA	155,255	70	
Clarksville, TN-KY	Clarksville Transit System	CTS	128,741	118	
Columbus, GA-AL	Metra Transit System	Metra	230,208	132	
St. Joseph, MO-KS	St. Joseph Transit	The Ride	73,990	49	
Peer Average			111,783	133	

Descriptions of each peer urbanized area and their transit system(s) follow.

Spartanburg, South Carolina

Spartanburg is located in northwest South Carolina. The 2010 population of the Spartanburg urbanized area is 36% higher than Warner Robins urbanized area, but its population density is 28% lower. This reflects the much larger land area of the Spartanburg area, which is 88% larger than the Warner Robins area. Like Warner Robins and Macon, Spartanburg is located close to another urbanized area, Greenville. The two cities are 30 miles apart. The Spartanburg area is served by two transit systems, which together provide a robust mix of urban fixed route, ADA complementary paratransit, rural dial-a-ride, and other transit services.

Spartanburg Area Regional Transit Agency (SPARTA) – SPARTA is operated by the City of Spartanburg. The bus system has eight fixed routes that meet at the SPARTA Passenger Center in downtown Spartanburg. These routes provide service throughout the community, serving employment sites, education centers, medical facilities and retail areas. As shown in Table 2, the SPARTA service area is only 40 square miles with a population of 70,000, as it is focused within the city limits. Service is provided on weekdays generally from 6:00 a.m. to 6:00 p.m., with select routes operating on Saturdays from approximately 11:00 a.m. to 6:00 p.m.

Service shown for SPARTA is for bus service only (no demand response). For residents who live within the SPARTA service area, but are unable to use the regular local bus service, SPARTA coordinates with the Spartanburg County Transportation Service Bureau (TSB) for the provision of ADA complementary paratransit within the required ¾ mile buffer on both sides of the fixed routes.



Spartanburg County Transportation Service Bureau (TSB) – TSB operations began in the late 1980s. Today, the TSB provides door-to-door demand response (Dial-A-Ride) transportation service to the general public, as well as ADA complementary paratransit for SPARTA, non-emergency transportation, and contracted transportation for various agencies, using a rather large fleet of 51 vehicles in the peak periods. As shown in Table 2, the TSB service area is very large at 811 square miles with a population of approximately 264,000, as its service area is the entire county. Dial-A-Ride service is available to all Spartanburg County residents. Its purpose is to help people get to health and human services, to jobs, as well as other destinations such as grocery stores or libraries. Advance reservations are required. Buses operate on weekdays from 4:00 a.m. to 7:00 p.m., depending on passenger requests. Saturday service is also available.

Gainesville, Georgia

Gainesville is located in northeast Georgia approximately 55 miles northeast of Atlanta. The 2010 population of the Gainesville urbanized area is only 2% lower than the Warner Robins urbanized area, but its population density is 22% lower. Gainesville's land area is 25% larger than Warner Robins. Transit service in the Gainesville area is operated by Hall Area Transit.

Hall Area Transit (HAT) – HAT is publicly operated by the Gainesville-Hall Community Service Center, the area's human service agency, and is funded at the local level jointly by the City of Gainesville and Hall County. HAT began operating Dial-a-Ride services in 1985. In 2001, HAT implemented fixed route and ADA complementary paratransit services. Today, within the City of Gainesville and on Atlanta Highway to Gainesville State College, HAT operates local bus service (known as the Red Rabbit), and ADA complementary paratransit service (known as Mobility Plus). Red Rabbit service operates on weekdays from 6:30 a.m. to 6:00 p.m. Mobility Plus service is provided within the required ¾ mile buffer on both sides of the fixed routes. In the outlying areas of Hall County, HAT operates Dial-a-Ride service available to the general public. Dial-A-Ride provides curb-to-curb service on weekdays from 6:30 a.m. until 6:00 p.m. Reservations must be made at least 48 hours in advance, with subscription service available for passengers with recurring trips. HAT also provides trips for Georgia Department of Human Services (DHS) agencies and consumers. As shown in Table 2, the HAT service area is 38 square miles with a population of nearly 32,000.

Johnson City, Tennessee

Johnson City is located in the northeastern corner of Tennessee in the Tri-Cities area of Johnson City, Kingsport, and Elizabethton. Johnson City and Elizabethton are in one urbanized area and Kingsport is in another. These two urbanized areas are 25 miles apart. The 2010 population of the Johnson City urbanized area is 10% lower than the Warner Robins urbanized area, and its population density is 17% lower. However, its land area is 9% larger than Warner Robins. Transit service in Johnson City is operated by Johnson City Transit, supplemented by intercity fixed "Connection" routes operated by Northeast Tennessee Rural Public Transit.

Johnson City Transit (JCT) – JCT began publicly operating Johnson City's transit system in 1979. Today, JCT primarily provides fixed route service and ADA complementary paratransit service (known as XTRA) in Johnson City. Other services include fixed routes serving East Tennessee State University (called BUCSHOT), as well as Job Access demand response service within the City supplementing the fixed routes. Fixed route service is generally operated on weekdays from 6:15 a.m. to 6:15 p.m. and on Saturday from 8:15 a.m. to 5:15 p.m. The XTRA service is provided within ¾ mile of a fixed route or within the corporate city limits of the City, whichever



provides furthest service to the JCT patron. BUCSHOT service is operated on weekdays when ETSU is in session. Job Access service is available from 5:30 a.m. until midnight, Monday through Saturday. All demand response services require advance reservations. As shown in Table 2, the JCT service area is 33 square miles with a population of approximately 49,000.

Cleveland, Tennessee

Cleveland is located in southeastern Tennessee, approximately 35 miles northeast of Chattanooga. For the Cleveland urbanized area, the 2010 population is half (50%) of the Warner Robins urbanized area, but its population density is only 8% lower. Cleveland's land area is also about half the size of Warner Robins. The Cleveland transit system is known as the Cleveland Urban Area Transit System. Transit service in Cleveland is operated by the Southeast Tennessee Human Resource Agency.

Cleveland Urban Area Transit System (CUATS) – CUATS is a small urban transit system that serves the Cleveland urbanized area operated by the Southeast Tennessee Human Resource Agency (SETHRA). Demand response service in Cleveland and Bradley County was implemented in 1974. In 2005, deviated fixed route service in the urban area was initiated, which meets the requirements of the ADA by providing for buses to deviate up to ¾ mile from the fixed routes to pick-up/drop-off ADA passengers. Today, the CUATS system consists of 5 deviated fixed routes, each with designated stops and transfer points. Service hours are Monday through Friday from 6:00 a.m. to 6:00 pm. As shown in Table 2, the CUATS service area is 24 square miles with a population of nearly 39,000. SETHRA continues to provide rural demand response service to the public in Bradley County, with service also available to Chattanooga.

Albany, Georgia

The Albany urbanized area is located in southwest Georgia with a very similar population density to the Warner Robins area. While its 2010 population is 28% lower than the Warner Robins urbanized area, its population density is only 2% lower. Albany's land area is 30% smaller than Warner Robins. Transit service in Albany is operated by the Albany Transit System as a division of the City.

Albany Transit System (ATS) – ATS began publicly operating Albany's transit system in 1974. Today, ATS provides fixed route service and ADA complementary paratransit services to the City of Albany. ATS is a 7 day operation which operates 10 routes between the hours of 5:00 a.m. and 8:30 p.m. Monday through Friday and on Saturdays from 6:15 a.m. to 8:30 p.m. Reduced service is operated on Sundays on 4 routes generally between the hours of 7:30 a.m. to 6:30 p.m. ATS' fixed-route network is arranged in a radial pattern, with buses meeting at the ATS Transfer Station (Greyhound Bus Station) every 30 minutes, at 15 minutes after and 15 minutes before the hour, to allow ATS patrons to make prompt, convenient transfers between buses. In addition to fixed route service, ATS' ADA complementary paratransit service operates using 6 paratransit vehicles (with advance reservations). As shown in Table 2, the ATS service area is 17 square miles with a population of nearly 76,000.

Macon, Georgia

Macon is Warner Robins' neighbor to the north. Based on 2010 Census figures, the Macon urbanized area is very similar in size to the Warner Robins urbanized area. Macon's population is 3% higher, its population



density is 6% higher, and its land area is 3% smaller than Warner Robins. Transit service in Macon is provided by the Macon-Bibb County Transit Authority.

Macon-Bibb Transit Authority (MTA) — Transit service in Macon and Bibb County has been publicly operated by the MTA since 1973. Until 10 years ago, MTA was operated without federal operating assistance from FTA. MTA is funded at the local level by the City of Macon and Bibb County. MTA provides fixed route service and ADA complementary paratransit services primarily within the City of Macon. MTA operates on weekdays and Saturdays, operating weekdays on 10 routes between the hours of approximately 5:30 a.m. and 11:00 p.m. and on Saturdays on 9 routes generally between the hours of 5:30 a.m. to 8:00 p.m. MTA's fixed-route network is arranged in a radial pattern, with almost all buses meeting at the MTA Terminal Station, allowing patrons to make prompt, convenient transfers between buses. ADA complementary Para-Transit service is also provided up to ¾ mile on either side of the fixed routes, with advance reservations. In addition, MTA also now operates a fixed route shuttle service for commuters between Macon and Robins Air Force Base on weekdays, called Buses into Robins Daily (BiRD). As shown in Table 2, the MTA service area is 70 square miles with a population of approximately 155,000.

Clarksville, Tennessee

The Clarksville urbanized area is located in north central Tennessee approximately 50 miles northwest of Nashville, and extends into Kentucky. The Clarksville area is home to Fort Campbell, a U.S. Army installation which straddles the Tennessee-Kentucky border (12 miles northwest of downtown Clarksville). Fort Campbell supports the 3rd largest military population in the Army and the 7th largest in the Department of Defense. Between active-duty military personnel and civilian employees, the post is home to over 26,000. There are also more than 20,000 family members, nearly 113,000 retirees, and over 18,000 in the Army Reserve & National Guard associated with Fort Campbell.

Like Macon, the Clarksville urbanized area is very similar in size to the Warner Robins urbanized area. Clarksville's population is 4% higher, its population density is 9% higher, and its land area is 5% smaller than Warner Robins. Transit service in Clarksville is operated by the Clarksville Transit System. Additionally, on June 1, 2012 the Middle Tennessee Regional Transportation Authority (RTA) began offering express bus service for commuters between a park & ride lot in Clarksville and the downtown Nashville transit center, with 3 trips in the morning peak and 3 trips in the afternoon peak.

Clarksville Transit System (CTS) – CTS began publicly operating Clarksville's transit system in 1987. Today, CTS provides fixed route service and ADA complementary paratransit services to the City of Clarksville and Fort Campbell. The system is radial, with all routes serving the Transfer Center at approximately the same time, enabling passengers to transfer from one route to another route to reach their final destination. CTS operates 8 fixed routes on weekdays from approximately 6:00 a.m. to 9:00 p.m. and on Saturdays from approximately 7:00 a.m. to 9:00 p.m. One of these routes serves Fort Campbell, with hourly service plus two extra trips in the morning peak (one extra trip on Saturdays), with weekday service beginning at 4:40 a.m. and Saturday service beginning at 6:40 a.m. ADA complementary paratransit service, called The Lift, is also provided with advance reservations. As shown in Table 2, the CTS service area is 118 square miles with a population of nearly 129,000.



Columbus, Georgia

The Columbus urbanized area is located in west central Georgia, and extends into Alabama (Phenix City). The Columbus area is home to Fort Benning, located 8 miles south of downtown Columbus. Between active-duty military personnel and civilian employees, the post is home to nearly 36,000. There are also nearly 7,000 reservists, more than 7,000 on-post dependents, approximately 14,000 off-post dependents, and over 30,000 off-post retirees.

In 2010, the Columbus urbanized area population was 44% larger than the Warner Robins urbanized area and its population density was 52% higher. However, its land area is 6% smaller than Warner Robins. Transit in Columbus is operated by the METRA Transit System. On the Alabama side of the urbanized area, transit service has been operated as Phenix City Express (PEX) since 1989 by the Lee-Russell Council of Governments.

METRA Transit System (METRA) – Transit services in Columbus and to Fort Benning have been publicly operated by METRA since 1978. METRA is a function of the Columbus Consolidated Government. It provides fixed route service and ADA complementary paratransit services to the City of Columbus, extending to Fort Benning. The system is radial, with all routes serving the METRA Transfer Center on the hour and/or half-hour to facilitate transfers. METRA operates 9 fixed routes on weekdays and Saturdays, generally from 4:30 a.m. to 8:30 p.m. One of these routes serves Fort Benning, which terminates at the Main Post Bus Station, with service every 30 to 60 minutes (taxi service is available on-post from this point). METRA also provides ADA complementary paratransit service with advance reservations. As shown in Table 2, the METRA service area is 132 square miles with a population of approximately 230,000.

St. Joseph, Missouri

The St. Joseph urbanized area is located in northwest Missouri approximately 55 miles north of Kansas City, and extends into Kansas. The 2010 population of the St. Joseph urbanized area is 41% lower than the Warner Robins urbanized area, but its population density is 54% higher. St. Joseph's land area is 61% smaller than Warner Robins. Transit service in St. Joseph is operated by St Joseph Transit.

St. Joseph Transit (The Ride) – St. Joseph Transit began publicly operating transit services in 1984. After the passage of the ADA, The Ride began exploring options for meeting the ADA requirements. In 1997, The Ride implemented a point deviation system, but switched to a route deviation system in 1999 to achieve greater efficiencies. The Ride provides route deviation service on all of its routes. The system is radial, with all 8 routes serving the downtown Transfer Center. There are also 2 remote transfer centers. Service is operated on weekdays from approximately 5:00 a.m. to 9:00 p.m. and on Saturdays from approximately 7:00 a.m. to 7:00 p.m. Route deviation service is available to those who prefer or need for the bus to pick them up or take them to a location off the regular route. Off-route pick-ups must be scheduled in advance and are recommended for off-route drop-offs, as well. As shown in Table 2, The Ride service area is 49 square miles with a population of nearly 74,000.

Peer System Characteristics

The following is a general overview of the peer system characteristics. This includes span of service, fares, service provision characteristics, annual passenger trips, and annual operating expenses and fare revenues.



Span of Service

Table 3 presents the days and hours of service for each of the peer transit systems. Most of the systems in peer urbanized areas operate on weekdays and Saturdays. Two systems, in Gainesville and Cleveland, only operate on weekdays. Albany operates the only system which operates seven days a week. Service in the least dense urbanized areas tends to be operated from approximately 6:00 a.m. to 6:00 p.m. on weekdays, with a reduced span of service on Saturdays. Spans of service are longer in the denser peer urbanized areas, including Macon and Clarksville, the areas closest in size to Warner Robins. The ADA requires that complementary paratransit service be offered the same days and same hours as fixed route service. The four least dense urbanized areas of Spartanburg, Gainesville, Johnson City, and Cleveland also provide dial-a-ride service in areas beyond the fixed route service area.

Table 3 – Transit System Days and Hours of Service

		Fixed Ro	ute/Route Deviation	ADA Com	plementary Paratransit	Other	Demand Response
Urbanized Area	Agency	Days	Hours	Days	Hours	Days	Hours
Spartanburg, SC	SPARTA	Weekdays	6:00 a.m. to 6:00 p.m.	Weekdays	n/a	Weekdays	n/a
		Saturday	11:00 a.m. to 6:00 p.m.	Saturday	n/a	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Spartanburg, SC	TSB	Weekdays	n/a	Weekdays	6:00 a.m. to 6:00 p.m.	Weekdays	4:00 a.m. to 7:00 p.m.
		Saturday	n/a	Saturday	11:00 a.m. to 6:00 p.m.	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Gainesville, GA	HAT	Weekdays	6:30 a.m. to 6:00 p.m.	Weekdays	6:30 a.m. to 6:00 p.m.	Weekdays	6:30 a.m. to 6:00 p.m.
		Saturday	n/a	Saturday	n/a	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Johnson City, TN	JCT	Weekdays	6:15 a.m. to 6:15 p.m.	Weekdays	6:15 a.m. to 6:15 p.m.	Weekdays	5:30 a.m. to 12:00 a.m.
		Saturday	8:15 a.m. to 5:15 p.m.	Saturday	8:15 a.m. to 5:15 p.m.	Saturday	5:30 a.m. to 12:00 a.m.
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Cleveland, TN	CUATS	Weekdays	6:00 a.m. to 6:00 pm.	Weekdays	n/a	Weekdays	7:00 a.m. to 4:30 p.m.
		Saturday	n/a	Saturday	n/a	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Albany, GA	ATS	Weekdays	5:00 a.m. to 8:30 p.m.	Weekdays	5:00 a.m. to 8:30 p.m.	Weekdays	n/a
		Saturday	6:15 a.m. to 8:30 p.m.	Saturday	6:15 a.m. to 8:30 p.m.	Saturday	n/a
		Sunday	7:30 a.m. to 6:30 p.m.	Sunday	7:30 a.m. to 6:30 p.m.	Sunday	n/a
Macon, GA	MTA	Weekdays	5:30 a.m. to 11:00 p.m.	Weekdays	5:30 a.m. to 11:00 p.m.	Weekdays	n/a
		Saturday	5:30 a.m. to 8:00 p.m.	Saturday	5:30 a.m. to 8:00 p.m.	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Clarksville, TN-KY	CTS	Weekdays	6:00 a.m. to 9:00 p.m.	Weekdays	6:00 a.m. to 9:00 p.m.	Weekdays	n/a
		Saturday	7:00 a.m. to 9:00 p.m.	Saturday	7:00 a.m. to 9:00 p.m.	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
Columbus, GA-AL	METRA	Weekdays	4:30 a.m. to 8:30 p.m.	Weekdays	4:30 a.m. to 8:30 p.m.	Weekdays	n/a
		Saturday	4:30 a.m. to 8:30 p.m.	Saturday	4:30 a.m. to 8:30 p.m.	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a
St. Joseph, MO-KS	The Ride	Weekdays	5:00 a.m. to 9:00 p.m.	Weekdays	n/a	Weekdays	n/a
		Saturday	7:00 a.m. to 7:00 p.m.	Saturday	n/a	Saturday	n/a
		Sunday	n/a	Sunday	n/a	Sunday	n/a



Fare Structure

Table 4 shows the fare structure for the peer systems. Four of the nine systems charge a \$1.00 full adult fare for local fixed route service (or route deviation in the case of Cleveland and St. Joseph). Another four systems charge \$1.25, including Spartanburg, Albany, Macon, and Clarksville. Columbus has the highest fare at \$1.30. Systems such as Macon which operate commuter routes can charge a premium fare for that service. Macon currently charges \$3.00 for the BiRD route between Macon and Robins Air Force Base.

For ADA complementary paratransit, the law allows transit systems to charge up to twice the adult full fare, which is what most of the systems charge. Transit systems are also required to offer a half-fare program for seniors and persons with disabilities when riding the local fixed route system. Young children ride free and students (youth) pay a discounted fare on most of the systems. The systems that also provide demand response service to the general public which is reported to the NTD (Spartanburg, Gainesville, and Johnson City) charge higher fares for this service. Both Spartanburg and Gainesville charge fares based on distance. Almost all of the peers provide some form of pass program, which allow riders to buy multiple ride tickets or monthly passes, usually at a discount.

In St. Joseph, where all routes can deviate from the fixed route to pick-up/drop-off passengers, the transit system charges an additional \$0.50 on top of its \$1.00 adult full fare. A few of the systems (Spartanburg, Macon, and Clarksville) charge a fee for passengers transferring from one route to another. Passengers transfer for free on the other systems. Gainesville and Johnson City allow local college students and/or staff to ride for "free" with proper identification. It should be noted that in cases where college students ride without paying a fare, the colleges often include this cost in student fees, which is then paid to the transit system (i.e., the fares are pre-paid).



Table 4 – Transit System Fares

			Seniors/					Pass
Urbanized Area	Agency	Adult Fare	Disabled	Children	Students	Paratransit	Other	Program?
Spartanburg, SC	SPARTA	\$1.25	\$0.75 peak	Free	n/a	n/a	Transfers: \$0.30	Yes
			\$0.50 off-peak & Sat.	(under 36")				
Spartanburg, SC	TSB	\$3 to \$8.50	n/a	n/a	n/a	\$1.80	n/a	No
Gainesville, GA	HAT	Red Rabbit: \$1.00	Red Rabbit: \$0.50	Red Rabbit: Free	Red Rabbit: \$0.50	\$2.00	Gainesville State &	Yes
		Dial-A-Ride: \$2 to \$13		(2 & under)	(18 & under)		Brenau: Free	
Johnson City, TN	JCT	Fixed Route: \$1.00	\$0.50	Free	\$0.50	\$2.00	ETSU Students &	Yes
		Job Access: \$2.50		(5 & under)	(grades K-5)	(within ¾ mi)	Free	
Cleveland, TN	CUATS	\$1.00	\$0.50	n/a	n/a	n/a	Chattanooga:	Yes
							\$5.00	
Albany, GA	ATS	\$1.25	\$0.50	Free	\$0.50	\$2.50	n/a	Yes
				(4 & under)	(6-12 years)			
Macon, GA	MTA	\$1.25	\$0.65	Free	\$0.75	\$2.50	Transfers: \$0.50	Yes
		BiRD: \$3.00	BiRD: \$3.00	(shorter than farebox)	(K-12)			
Clarksville, TN-KY	CTS	\$1.25	\$0.60	Free	\$0.90	\$2.00	Transfers: \$0.25	Yes
				(4 & under)	(K-12)			
Columbus, GA-AL	METRA	\$1.30	\$0.65	Up to \$1.30	\$1.00	\$2.50	Uptown Express:	Yes
		Ft. Benning: \$1.90	Ft. Benning: \$0.95	(depending on height)			\$0.55	
St. Joseph, MO-KS	The Ride	\$1.00	\$0.50	\$0.75	n/a	n/a	Route Deviation:	Yes
				(6-18)			\$0.50	



Service Provision Characteristics

Table 5 displays the peak vehicles, annual revenue vehicle-miles, and annual revenue vehicle-hours for the peer systems for 2010. These are three key indicators of overall system size, and are the major variables that drive the operations and maintenance costs of a transit system.

Table 5 – Service Provision Characteristics

		Peak Vehicles		Annual Revenue Hours		Annual Revenue Miles		Miles		
	Transit		Demand			Demand		Demand		
Urbanized Area	System	Bus	Response	Total	Bus	Response	Total	Bus	Response	Total
Spartanburg, SC	TSB	n/a	51	51	n/a	116,756	116,756	n/a	1,923,817	1,923,817
Gainesville, GA	HAT	6	10	16	10,063	10,248	20,311	189,050	163,415	352,465
Johnson City, TN	JCT	12	11	23	29,349	22,131	51,480	414,422	191,228	605,650
Cleveland, TN	CUATS	5	5	10	15,008	14,336	29,344	152,768	75,488	228,256
Albany, GA	ATS	7	4	11	31,612	6,825	38,437	529,949	98,707	628,656
Macon, GA	MTA	17	5	22	73,788	8,863	82,651	1,054,436	121,562	1,175,998
Clarksville, TN-KY	CTS	16	8	24	62,492	21,328	83,820	1,040,126	308,202	1,348,328
Columbus, GA-AL	Metra	16	6	22	61,077	12,283	73,360	843,428	201,331	1,044,759
St. Joseph, MO-KS	The Ride	17	n/a	17	75,104	n/a	75,104	857,597	n/a	857,597
Peer Average		12	13	20	42,203	26,596	59,260	594,956	385,469	843,835

Peak Vehicles

The number of peak vehicles is an indicator of overall transit system size. It reflects the maximum number of buses operated during times when service levels are greatest, usually during the weekday peak periods. As shown in Table 5 and Figure 3, the total peak vehicles (bus and demand response) of the peers ranged 10 to 51 vehicles, with an average of 20 vehicles. The number of peak vehicles used in fixed route service ranged from 5 to 17 vehicles, with an average of 12. The number of peak vehicles used in demand response service ranged from 4 to 51 with an average of 13. Most of the systems operated fewer demand response vehicles than buses. Exceptions were Spartanburg, Gainesville, and Johnson City, which all provide dial-a-ride service to a larger service area, requiring more vehicles. As evident in Figure 3, it should be noted that the averages of total and demand response vehicles are skewed upwards somewhat by the Spartanburg demand response system, which uses 51 vehicles to cover a very large service area.



50
40
30
20
SPARTA TSB HAT JCT CUATS ATS MTA CTS Metra The Ride Peer Average

Figure 3 - Number of Peak Vehicles

Annual Revenue Hours and Miles

Revenue hours and revenue miles indicate the hours and miles vehicles are operated in revenue service. Revenue service is when a vehicle is available to the general public and there is an expectation of carrying passengers. In general, revenue service includes layover/recovery, but excludes deadhead. Layover/recovery is the time scheduled at the end of the route before the departure time of the next trip for the operator to take a break (layover) and/or to provide time to get back on schedule before the next trip departs if the trip arrives late at the end of the route (recovery). Deadhead, in general, is the time/miles leaving or returning to the garage or yard facility or changing routes. Figures 4 and 5 present the annual revenue hours and miles for the peers, respectively.

■ Bus ■ Demand Response



Figure 4 – Annual Revenue Hours

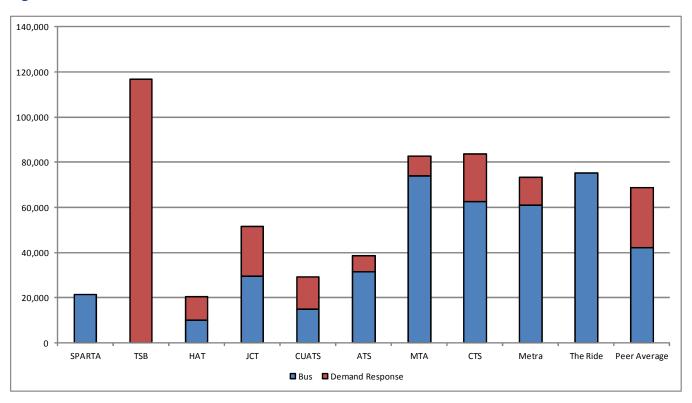
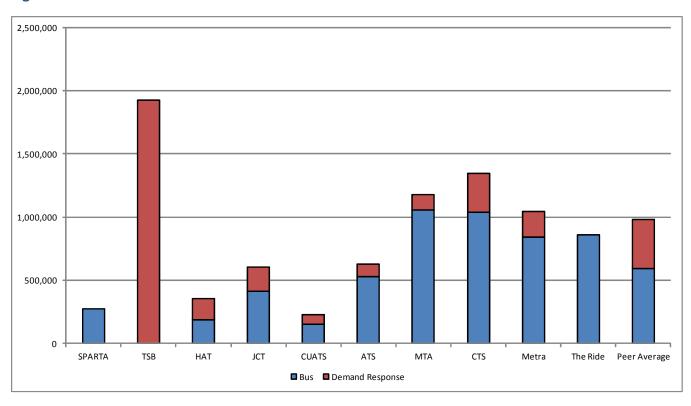


Figure 5 – Annual Revenue Miles





As shown in Table 5 and Figure 4, the total annual revenue hours of the peers ranged 20,311 to 116,756, with an average of 59,260 hours. Excluding Spartanburg's TSB services, a marked difference in total revenue hours is evident between the five least dense and the four most dense urbanized area peers. Excluding Spartanburg, Gainesville and Cleveland operated the fewest number of revenue hours, while Macon and Clarksville were at the top of the range. On average, 55% of total hours were operated in fixed route mode and 45% in demand response.

As shown in Table 5 and Figure 5, the total annual revenue miles of the peers ranged from 228,256 to 1,923,817, with an average of 843,835 miles. Like revenue hours, excluding Spartanburg's TSB services, a marked difference in total revenue miles is evident between the five least dense and the four most dense urbanized area peers. Excluding Spartanburg, Gainesville and Cleveland were on the low end of the revenue miles range and Macon and Clarksville were at the top of the range. On average, 71% of total miles were operated in fixed route mode and 29% in demand response.

Annual Passenger Trips

Annual ridership, as measured in passenger trips, reflects the total number of boardings made by users of the transit system. A passenger trip is recorded every time a person boards a transit vehicle, including multiple transfers that may occur between the trip origin and the final destination. Table 6 and Figure 6 present the passenger trips for each of the peers. The total annual passenger trips for the peers ranged 82,880 to 1,100,567, with an average of 541,980 passenger trips. As seen in Figure 6 compared to Figures 4 and 5, annual passenger trips are not necessarily correlated with revenue hours and miles. Gainesville and Cleveland were on the low end of the passenger trips range, while Albany and Columbus were at the top of the range. Because of the three peers that provide either fixed route or demand response service, but not both, the average total trips are actually lower than the average bus trips. If these three peers are removed, on average, 96% of total passenger trips were on the fixed route system and only 4% were demand response.

Table 6 – Annual Passenger Trips

	Transit
Urbanized Area	System
Spartanburg, SC	SPARTA
Spartanburg, SC	TSB
Gainesville, GA	HAT
Johnson City, TN	JCT
Cleveland, TN	CUATS
Albany, GA	ATS
Macon, GA	MTA
Clarksville, TN-KY	CTS
Columbus, GA-AL	Metra
St. Joseph, MO-KS	The Ride
Peer Average	

Annual Passenger Trips										
	Demand									
Bus	Response	Total								
519,084	n/a	519,084								
n/a	246,085	246,085								
119,671	27,234	146,905								
562,453	40,608	603,061								
60,032	22,848	82,880								
860,214	13,878	874,092								
748,392	11,787	760,179								
703,464	30,254	733,718								
1,081,323	19,244	1,100,567								
353,225	n/a	353,225								
556,429	51,492	541,980								



1,000,000

Figure 6 – Annual Passenger Trips

0

SPARTA

Annual Operating & Maintenance Costs and Revenue Sources

JCT

This section highlights the revenue sources used by the peers to fund operating & maintenance (O&M) costs. Table 7 and Figure 7 present the annual O&M costs for bus and demand response for each peer.

■ Bus ■ Demand Response

MTA

CTS

Metra

The Ride Peer Average

CUATS

Table 7 – Annual Operating & Maintenance Costs by Mode

HAT

			Annual O&M Costs				
	Transit		Demand				
Urbanized Area	System		Bus	Response	Total		
Spartanburg, SC	SPARTA	Ç	51,484,273	n/a	\$1,484,273		
Spartanburg, SC	TSB		n/a	\$4,541,354	\$4,541,354		
Gainesville, GA	HAT		\$633,534	\$577,947	\$1,211,481		
Johnson City, TN	JCT	Ç	\$1,460,505	\$1,223,227	\$2,683,732		
Cleveland, TN	CUATS		\$506,960	\$421,507	\$928,467		
Albany, GA	ATS	ç	1,906,741	\$580,737	\$2,487,478		
Macon, GA	MTA	ç	34,203,402	\$231,262	\$4,434,664		
Clarksville, TN-KY	CTS	ç	3,392,693	\$1,005,955	\$4,398,648		
Columbus, GA-AL	Metra	Ç	3,578,817	\$486,129	\$4,064,946		
St. Joseph, MO-KS	The Ride	Ç	\$4,566,686	n/a	\$4,566,686		
Peer Average		\$	2,414,846	\$1,133,515	\$3,080,173		



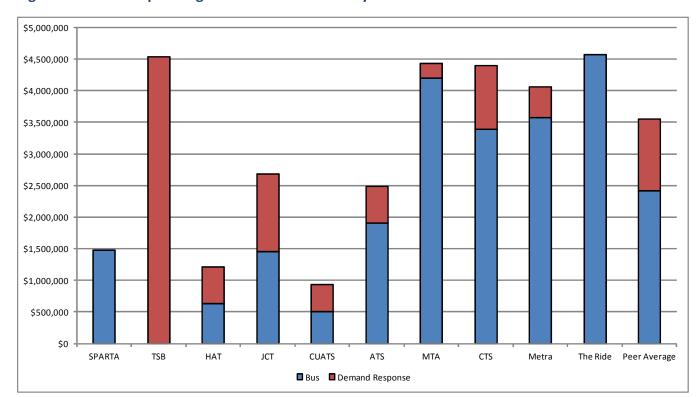


Figure 7 – Annual Operating & Maintenance Costs by Mode

Annual O&M costs for the peers primarily reflect the peak vehicles operated, annual revenue hours, and annual revenue miles. As shown in Table 7 and Figure 7, the total annual O&M costs of the peers ranged from approximately \$928,500 to \$4.6 million, with an average of \$3.1 million. Gainesville and Cleveland were again at the low end of the range, while St. Joseph and Spartanburg's TSB system were at the top of the range, followed closely by Macon and Clarksville. On average, 78% of total O&M costs were for the bus system and 22% were for demand response.

Table 8 and Figure 8 show the breakdown of funding sources for the total annual O&M costs for the peers. On average, 39% of the peers' O&M costs in 2010 came from local sources, 37% came from federal sources, 15% came from fares, 7% came from state sources, and 2% came from other unspecified sources.

It is important to note that, unlike most states, the State of Georgia does not provide operating assistance to transit agencies. Also, based on the 2000 Census, the Columbus, GA-AL urbanized area had a population over 200,000. As a large urban (over 200,000) area, Columbus was not eligible for federal operating assistance at the time of the 2010 NTD.

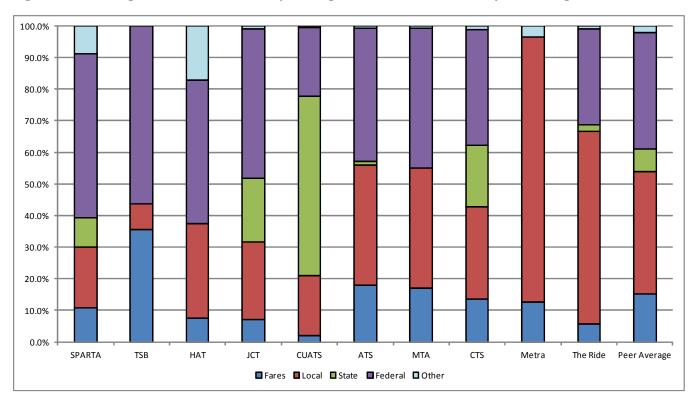
The percentage of other funding was in the single digits for all peers, except for Gainesville at 17%. This reflects funding received from trips provided for Georgia Department of Human Services (DHS) agencies and consumers, and may also include pre-paid fares received from the local colleges (Gainesville State College and Brenau Women's University) served by the transit system.



Table 8 – Funding Sources for Annual Operating & Maintenance Costs

		Annual O&M Funds by Source					
Urbanized Area	Transit System	Fares	Local	State	Federal	Other	
Spartanburg, SC	SPARTA	\$159,921	\$286,433	\$137,689	\$768,459	\$131,771	
Spartanburg, SC	TSB	\$1,617,260	\$365,435	\$0	\$2,558,659	\$0	
Gainesville, GA	HAT	\$92,541	\$361,309	\$0	\$551,230	\$206,401	
Johnson City, TN	JCT	\$190,560	\$661,472	\$537,043	\$1,271,228	\$23,430	
Cleveland, TN	CUATS	\$18,906	\$177,000	\$525,209	\$203,152	\$4,200	
Albany, GA	ATS	\$457,214	\$959,207	\$31,683	\$1,066,825	\$19,037	
Macon, GA	MTA	\$759,971	\$1,692,580	\$0	\$1,966,076	\$35,863	
Clarksville, TN-KY	CTS	\$602,771	\$1,279,883	\$858,916	\$1,606,980	\$53,552	
Columbus, GA-AL	Metra	\$513,562	\$3,412,622	\$0	\$0	\$138,762	
St. Joseph, MO-KS	The Ride	\$265,698	\$2,778,464	\$96,501	\$1,385,312	\$40,810	
Peer Average		\$467,840	\$1,197,441	\$218,704	\$1,137,792	\$65,383	

Figure 8 – Funding Sources for Annual Operating & Maintenance Costs by Percentage



System Performance Comparisons

This section presents a detailed comparison of specific system performance measures, in order to assess the performance of the peers using "apples to apples" comparisons. These performance measures focus on: vehicle utilization, service productivity, cost efficiency, and cost effectiveness.



Vehicle Utilization

Vehicle utilization is a productivity measure based on the total number of revenue hours and revenue miles per peak vehicle. This measure assesses the peers' ability to efficiently use the vehicles available to provide service.

Revenue Hours per Peak Vehicle

The ratio of revenue hours per peak vehicle compares the number of revenue hours the peer systems operate their peak vehicles. Figure 9 shows that the vehicles used in bus service were used more productively to provide revenue hours of service than demand response vehicles. The peer average for bus service in 2010 was 3,652 revenue hours per peak vehicle, compared to only 2,128 revenue hours per peak demand response vehicle. For bus service, Albany was the most productive, followed closely by St. Joseph based on this measure. For demand response service, Clarksville was the most productive.

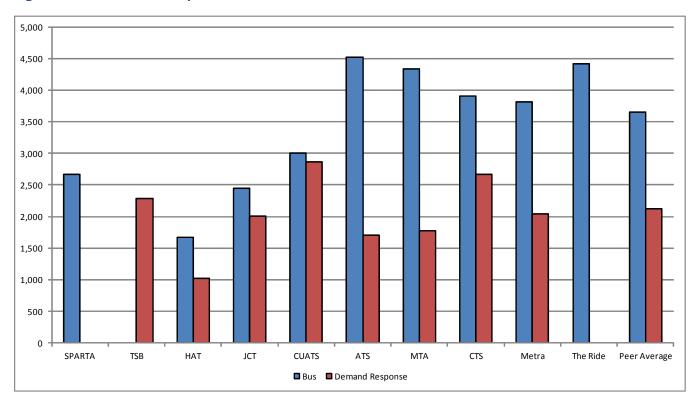


Figure 9 – Revenue Hours per Peak Vehicle

Revenue Miles per Peak Vehicle

Revenue miles per peak vehicle also measures how productively vehicles are used based on the number of revenue miles reported. Figure 10 presents a similar snapshot to Figure 9. The peer average for bus service in 2010 was 51,487 revenue miles per peak vehicle, compared to only 30,838 revenue miles per peak demand response vehicle. For vehicles used in both bus and demand response service, Albany was the most productive.



80,000 70,000 60.000 50,000 40,000 30,000 20,000 10,000 n **SPARTA** TSB HAT JCT **CUATS** CTS Metra The Ride Peer Average ■ Bus ■ Demand Response

Figure 10 – Revenue Miles per Peak Vehicle

Service Productivity

Service productivity measures how effectively the service is transporting passengers relative to the level of service. These ratios include passenger trips per revenue hour and passenger trips per revenue mile.

Passenger Trips per Revenue Hour

This measure reveals how much the service is used for each revenue hour of service provided. As evident from Figure 11, the difference in the productivity of bus service compared to demand response service is even more pronounced when looking at this measure. The peer average for bus service in 2010 was 13.2 passenger trips per revenue hour, compared to only 1.9 passenger trips per demand response revenue hour. For bus service, Albany was the most productive based on this measure. For demand response service, Gainesville was the most productive.

Passenger Trips per Revenue-Mile

This measure reveals how much the service is used for each revenue hour of service provided. The vast difference in the productivity of bus service compared to demand response service for this measure is also evident in Figure 12. The peer average for bus service in 2010 was 0.94 passenger trips per revenue mile, compared to only 0.13 passenger trips per demand response revenue mile. For bus service, Spartanburg was the most productive based on this measure. For demand response service, Cleveland was the most productive.



Figure 11 – Passenger Trips per Revenue Hour

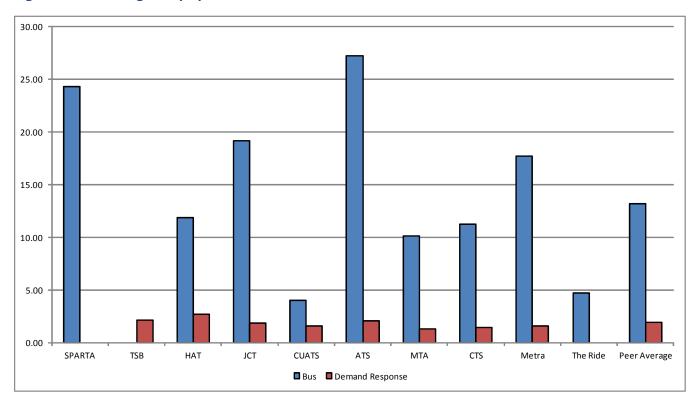
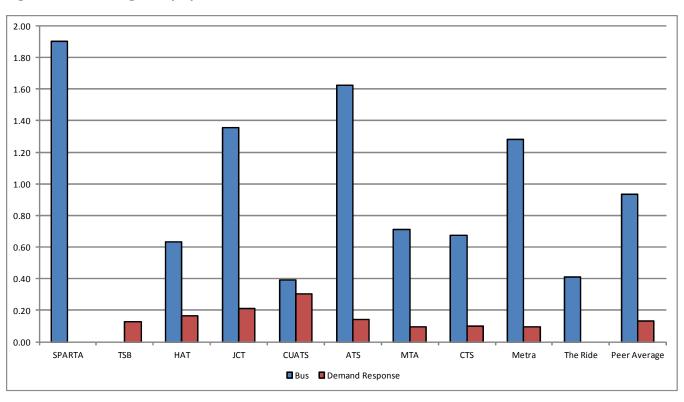


Figure 12 – Passenger Trips per Revenue Mile





Cost Efficiency

Transit systems must balance the level of service they provide against the budget required to do so. Service efficiency can be measured in several ways, including operating & maintenance (O&M) costs per revenue hour and O&M costs per revenue mile.

Operating & Maintenance Costs per Revenue Hour

The O&M costs per revenue hour ratio measures the cost to provide one hour of service. As shown in Figure 13, the peer average for bus service in 2010 was \$57.22 per revenue hour, and \$42.62 per demand response revenue hour. With the exception of Johnson City and Albany, the cost per revenue hour was higher for bus service than for demand response service. For bus service, Spartanburg was the least cost efficient based on this measure, and Cleveland was the most cost efficient. For demand response service, Albany was the least cost efficient, and Macon was the most cost efficient.

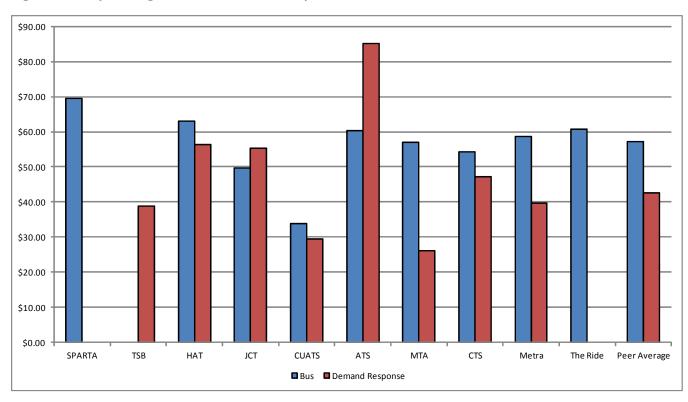


Figure 13 – Operating & Maintenance Costs per Revenue Hour

Operating & Maintenance Costs per Revenue Mile

Another common cost efficiency measures is O&M costs per revenue mile, which compares the costs to operate one revenue mile of service. As shown in Figure 14, the peer average for bus service in 2010 was \$4.06 per revenue mile, and \$2.94 per demand response revenue mile. Costs per revenue mile for bus compared to demand response varied widely. For bus service, Spartanburg was least cost efficient based on this measure, and Clarksville was the most cost efficient. For demand response service, Johnson City was the least cost efficient, and Macon was the most cost efficient.



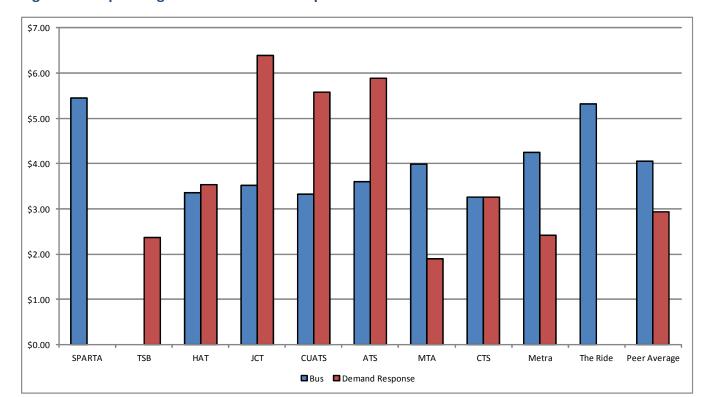


Figure 14 – Operating & Maintenance Costs per Revenue Mile

Cost Effectiveness

Cost effectiveness measures indicate how productive a transit system is in terms of costs. Cost effectiveness can be measured in several ways, including O&M costs per passenger trip, gross operating subsidy per passenger trip, and farebox recovery ratio.

Operating & Maintenance Costs per Passenger Trip

The ratio of O&M costs per passenger trip is a measure of effectiveness based on how much one passenger trip costs the transit agency. As shown in Figure 15, the O&M cost per passenger trip is dramatically lower for bus service than demand response service. The peer average for bus service in 2010 was \$4.34 per passenger trip, but \$22.01 per demand response passenger trip. For bus service, St. Joseph was the least cost effective based on this measure, and Albany was the most cost effective. For demand response service, Albany was the least cost effective, and Cleveland and Spartanburg were the most cost effective.



\$45.00 \$40.00 \$35.00 \$30.00 \$25.00 \$20.00 \$15.00 \$10.00 \$5.00 \$0.00 **SPARTA** TSB HAT JCT **CUATS** MTA CTS ATS Metra The Ride Peer Average ■ Bus ■ Demand Response

Figure 15 – Operating & Maintenance Costs per Passenger Trip

Gross Operating Subsidy per Passenger Trip

This ratio measures how much of the O&M costs per passenger trip are subsidized (i.e., not covered by fares). As shown in Figure 16, the gross operating subsidy per passenger trip is dramatically lower for bus service than demand response service. The peer average for bus service in 2010 was \$3.68 per passenger trip, but \$18.60 per demand response passenger trip. For bus service, St. Joseph was the least cost effective based on this measure, and Albany was the most cost effective. For demand response service, Albany was the least cost effective, and Spartanburg was the most cost effective.



\$45.00 \$40.00 \$35.00 \$30.00 \$25.00 \$20.00 \$15.00 \$10.00 \$5.00 \$0.00 **SPARTA** TSB HAT JCT **CUATS** ATS CTS Metra The Ride Peer Average ■ Bus ■ Demand Response

Figure 16 – Gross Operating Subsidy per Passenger Trip

Farebox Recovery Ratio

The extent to which fares cover O&M costs is referred to as the farebox recovery rate. Farebox recovery ratios for bus and demand response for the peers are shown in Figure 17. Farebox recovery ratios for bus range from about 3% to 24%, while demand response ratios range from about 1% to almost 24%. The averages for both bus and demand response were about 15%. However, the high demand response farebox recovery ratio for Spartanburg's TSB system (which charges zone-based fares) skews the demand response average. Without the TSB, the demand response average is only 8%. Excluding the TSB, the demand response farebox recovery ratio is significantly lower than for the bus service, even though the systems are able to charge fares that are twice as high as the bus service. For bus service, Cleveland is the least cost effective in farebox recovery and Columbus is the most cost effective. For demand response service, Cleveland is the least cost effective in farebox recovery and Spartanburg is the most cost effective.



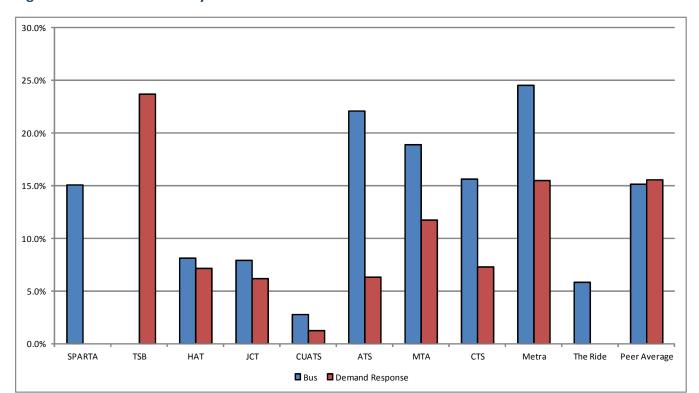


Figure 17 - Farebox Recovery Ratio

Key Findings of the Peer Analysis

This peer analysis identifies nine urbanized areas that overall are comparable in density, population, and size to the Warner Robins urbanized area. The transit systems in these areas vary in terms of type, amount, costs, and performance of their services. The peer areas and their transit operator(s) are:

- Spartanburg, SC Spartanburg Area Regional Transit Authority (SPARTA) and Spartanburg County Transportation Service Bureau (TSB)
- Gainesville, GA Hall Area Transit (HAT)
- Johnson City, TN Johnson City Transit System (JCT)
- Cleveland, TN Cleveland Urban Area Transit System (CUATS)
- Albany, GA Albany Transit System (ATS)
- Macon, GA Macon-Bibb County Transit Authority (MTA)
- Clarksville, TN Clarksville Transit System (CTS)
- Columbus, GA-AL Metra Transit System (METRA)
- St. Joseph, MO-KS St. Joseph Transit (The Ride)



The previous sections provide a description of the peer selection process and overview, a summary of peer system characteristics, and detailed comparisons for key performance measures of service productivity. Key findings from the analysis are summarized below.

- Service Area Characteristics When the peer urbanized areas' 2010 Census population, population density, and size are averaged, they closely approximate the Warner Robins urbanized area (within 5%). Based on 2010 Census figures, the Macon and Clarksville urbanized areas are both very similar in size to the Warner Robins urbanized area.
- Peers Selected The nine peers selected represent a cross-section of transit service types and organizational structure. In the four least dense urbanized areas (Spartanburg, Gainesville, Johnson City, and Cleveland), both urban fixed route and rural demand response service are provided by the systems in this peer analysis. Systems in two of the areas, Clarksville and Columbus, provide fixed route service to major military installations (Fort Campbell and Fort Benning, respectively). Systems in two of the areas meet ADA requirements by providing route deviation service. Most of the systems operate on weekdays and Saturdays, though two operate only on weekdays and one operates seven days a week. Most of the systems operate bus service at full adult fares of either \$1.00 or \$1.25. Cleveland, Macon, and Columbus charge premium fares for routes extending beyond their service areas.
- Service Provision Characteristics In 2010, the total peak vehicles (bus and demand response) operated by the peers ranged 10 to 51 vehicles, with an average of 20 vehicles. Most of the systems operated fewer demand response vehicles than buses, with the exception of systems providing dial-a-ride service to a larger area. The total annual revenue hours of the peers ranged 20,311 to 116,756, with an average of 59,260 hours. The total annual revenue miles of the peers ranged from 228,256 to 1,923,817, with an average of 843,835 miles. On average, the majority of total revenue hours and miles were operated in bus service. Urbanized area density and total revenue hours and miles are, in general, closely correlated, with more service provided in the densest areas.
- Annual Passenger Trips The total annual passenger trips for the peers ranged 82,880 to 1,100,567, with an average of 541,980 passenger trips. Gainesville and Cleveland were on the low end of the passenger trips range, while Albany and Columbus were at the top of the range. The vast majority of these trips were on the bus system, with a small percentage on the demand response system.
- Annual Operating Costs and Revenue Sources The total annual O&M costs of the peers ranged from approximately \$928,500 to \$4.6 million, with an average of \$3.1 million. Gainesville and Cleveland were again at the low end of the range, while St. Joseph and Spartanburg's TSB system were at the top of the range. On average, 78% of total O&M costs were for the bus system and 22% were for demand response. On average, 39% of the peers' O&M costs in 2010 came from local sources, 37% came from federal sources, 15% came from fares, 7% came from state sources, and 2% came from other unspecified sources.



- Vehicle Utilization The vehicles used in bus service were used more productively to provide revenue hours and miles of service than demand response vehicles. The peer average for bus service in 2010 was 3,652 revenue hours per peak vehicle, compared to only 2,128 revenue hours per peak demand response vehicle. The peer average for bus service in 2010 was 51,487 revenue miles per peak vehicle, compared to only 30,838 revenue miles per peak demand response vehicle. For bus and demand response service combined, St. Joseph was the most productive in hours per vehicle, and Macon was the most productive in miles per vehicle.
- Service Productivity The difference in the productivity of bus service compared to demand response service is even more pronounced when looking at passenger trips per revenue hour and mile. The peer average for bus service in 2010 was 13.2 passenger trips per revenue hour and 0.94 passenger trips per revenue mile, compared to only 1.9 passenger trips per demand response revenue hour and 0.13 passenger trips per demand response revenue mile. For bus and demand response service combined, Albany was the most productive in O&M costs per revenue hour and mile.
- Cost Efficiency —The peer average O&M costs for bus service in 2010 was \$57.22 per revenue hour and \$4.06 per revenue mile, compared to \$42.62 per demand response revenue hour and \$2.94 per demand response revenue mile. For bus and demand response service combined, Cleveland was the most efficient in costs per hour, and Clarksville was the most efficient in costs per mile.
- Cost Effectiveness The O&M cost per passenger trip and gross operating subsidy is dramatically lower for bus service than demand response service. The peer averages for bus service in 2010 were \$4.34 total costs and \$3.68 operating subsidy per passenger trip, but \$22.01 total costs and \$18.60 operating subsidy per demand response passenger trip. For bus and demand response service combined, Albany was the most cost effective in O&M costs and gross operating subsidy per passenger trip. The farebox recovery ratios for both bus and demand response averaged about 15%. However, the ratio for demand response drops to 8% without Spartanburg's TSB system. For bus and demand response service combined, Columbus is the most cost effective in farebox recovery.

